

WHAT IS CLAIMED IS:

- Sub A*
1. A system having a video display screen that provides video to a user, the position of the display screen being adjustable based upon the location of the user with respect to the display screen, the system comprising at least one image capturing device trainable on a viewing region of the display screen and coupled to a control unit having image recognition software that identifies the user in an image generated by the image capturing device, the software of the control unit also generating at least one measurement of the position of the user based upon the detection of the user in the image.
 2. The system of Claim 1, wherein the display screen is part of an integrated display unit that also incorporates display projection components.
 3. The system of Claim 1, wherein the display screen is a screen in a home theater system.
 4. The system of Claim 1, wherein the control unit adjusts the position of the display screen so that a normal vector to the display screen faces the user, the control unit using the at least one measurement of the position of the user to adjust the position of the display.
 5. The system of Claim 4, wherein the at least one measurement of the position of the user is determined by a pose of the user's face detected in the image by the

image recognition software.

6. The system of Claim 5, wherein the at least one measurement of the position of the user is an angular displacement of the user with respect to a reference axis, the detected pose being correlated to the angular displacement of the user from the axis.

7. The system of Claim 6, wherein the control unit rotates the display screen so that the normal vector to the display screen has the angular displacement of the user with respect to the reference axis.

8. The system of Claim 4, wherein the at least one measurement of the position of the user is determined by the position of the user in the image by the image recognition software.

9. The system of Claim 8, wherein the at least one measurement of position of the user is an angular displacement of the user with respect to a reference axis, the control unit using the position of the detected user in the image to determine the angular displacement.

10. The system of Claim 9, wherein the control unit rotates the display screen so that the normal vector to the display screen has the angular displacement of the user with respect to the reference axis.

11. The system of Claim 1, wherein the control unit identifies the images of two or more users in the image generated by the image capturing device, the control unit generating an average position of the users based upon the detections of the users in the image.

12. The system of Claim 11, wherein the control unit adjusts the position of the display screen based upon based upon the average position of the users.

13. A system having a video display screen that provides video to a user, the system comprising at least one image capturing device trainable on a viewing region of the display screen and coupled to a control unit having image recognition software that identifies one or more gestures of the user in an image generated by the image capturing device, the control unit invoking an adjustment of the orientation of the display screen based upon the identified gesture of the user in the image.

14. The system of Claim 13, wherein the one or more gestures detected of the user are hand gestures.

15. The system of Claim 14, wherein each of the one or more hand gestures are correlated to movement of the display screen in a pre-determined direction.

16. A system having a video display screen that provides video to a user, the system comprising at least one audio capturing device that captures audio input from a

viewing region of the display screen and coupled to a control unit having speech recognition software that identifies one or more audio commands spoken by a user in the viewing region, the control unit invoking an adjustment of the orientation of the display screen based upon the identified audio commands received from the user.

17. The system of Claim 16, wherein each of the one or more audio commands are correlated to movement of the display screen in a pre-determined direction.

Aldco